GOVERNMENT OF INDIA
AGRICULTURE AND FARMERS WELFARE
LOK SABHA

UNSTARRED QUESTION NO:1538
ANSWERED ON:03.05.2016
Farming Technology
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Will the Minister of AGRICULTURE AND FARMERS WELFARE be pleased to state:

(a) whether the Government has conducted any study on the penetration of farming techniques and technology amongst the farmers in the country and if so, the findings thereof;

(b) whether the Government has taken substantial steps to transfer the recently developed technological innovations and researches conducted by various agricultural research institutions to the farmers growing pulses and other crops in the country and if so, the details thereof;

(c) whether the Government has incentivized these institutions to develop more such path breaking innovations which can revolutionise the farming sector and if so, the details thereof;

(d) whether the Government proposes to provide SIM enabled energy efficient agricultural water pumps to the farmers and to replace the age-old ones; and

(e) if so, the details thereof?

Answer

MINISTER OF STATE IN THE MINISTRY OF AGRICULTURE AND FARMERS WELFARE
(SHRI MOHANBHAI KALYANJIBHAI KUNDARIYA)

(a) Yes, Madam. The ICAR through the vast network of 642 Krishi Vigyan Kendras (KVKs) spread across the country conducts frontline demonstration and technology transfer at the farmer's field. ICAR has been studying the penetration of the farming technologies developed under National Agricultural Research System (NARS) under the field. In a recent study on "Impact assessment of KVKs on dissemination of improved practices and technologies" conducted by ICAR through a third party "National Institute of Labour Economics Research and Development (NILERD)", it was found that the number of technologies transferred/ year by each KVK averaged 7.5 of which 64% pertained to field crops and 21% to horticulture. Nearly 40% farmers implemented the technologies immediately upon seeing the demonstrations while others adopted them during subsequent seasons after reconfirming the results. 42% of technology targeted higher productivity, one third targeted enhanced farm incomes, while the remaining technologies targeted reduced drudgery.
(b) In order to ensure technological backstopping strengthening of Extension System through KVKs including on-farm testing is given importance to identify the location specificity of agricultural technologies under various farming systems, frontline demonstrations to establish the production potentials of improved agricultural technologies on the farmers' fields, and training of farmers and extension personnel to update their knowledge and skills. Broadening the scope of KVK activities to work as resource and knowledge centre of agricultural technology for supporting initiatives of public, private, voluntary sector and other key stakeholders for improving the agricultural economy of the district has given desired results. To demonstrate the potential of latest pulses production and protection technologies, extensive demonstrations have been conducted by 300 KVKs situated across the country. The budget allocation for the purpose is Rs. 12.00 Crores for 2015-16 under the National Food Security Mission. In this programme, about 32,027 demonstrations on rabi pulse crops were conducted on about 12,810.67 ha in the country by the Extension Division of ICAR during past 1 year.

(c) Indian Council of Agricultural Research (ICAR) is having research and development programmes in rice, wheat, maize, millets, fodder crops, oilseeds, pulses, sugarcane, cotton and other fiber crops. The crop improvement programmes give emphasis on development of new crop varieties/hybrids with improved quality and tolerance/resistance to biotic and abiotic stresses and making crops able to withstand the weather extremities. Targeted integration of economically important genes through structural and functional genomics/molecular breeding has been strengthened.

In order to incentivizing these institutions ICAR approved a XII plan scheme on Incentivizing Research in Agriculture with a total budget provision of Rs 200.00 crore comprising five projects on cutting edge technologies. The overall objective of this programme is to make efforts towards enhancing production potential of rice through transformation from C3 to C4 pathway and by enhancing yield under low light intensity situation particularly in eastern India. The programme also contemplates to reduce chemical fertilizer use through engineering biological nitrogen fixation in rice and wheat. Molecular breeding for stress tolerance will give a boost to major crops like rice, wheat, mustard and chick pea. There are 27 organizations in different component projects to carry out the designated objectives and activities. Further, ICAR has initiated Extramural Research fund to augment research in frontier areas with an outlay of Rs.75.0 crores during the current plan.

(d) & (e): Sim enabled pump on-off technologies are available in the market and can be adopted by the farmers with requisite training support from ICAR Institutes/KVKs. The Govt. of Andhra Pradesh has recently initiated a programme on their promotion. The ICAR

Institutes including CIAE Bhopal are working on the development of water and energy saving irrigation technologies.
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